

## **Key Issues**

### **Nutrient Credit Exchange Study**

(June 16, 2011 DRAFT for Committee Review and Discussion)

The following are issues that were raised by the members of the Nutrient Credit Exchange Study Committee at the initial meeting of the Committee held on April 13, 2011. The purpose of this document is to reflect the range of issues identified by the committee and offer a series of questions to gather further information from the committee and clarify issues in advance of developing draft elements of a report.

#### **1. Goals:**

- Lower the potentially significant costs that are faced by public and private sector including local governments
- Promote flexibility among sectors in meeting TMDL requirements
- Increase efficiency of dollars spent
- Achieve real and measurable nutrient reductions
- Establish a clear and transparent process for participation and credit generation

#### Discussion Questions

Do you have comments on these goals and are there other specific goals that you would recommend?

#### **2. Program Design:**

- Ensure detailed and accessible accounting of trades and credit balances
- Allow for trading or offsets by entities holding multiple permits among those permits.
- Establish a functioning offset market for new and expanding facilities
- Continue existing market for POTW compliance; and protect investment made by wastewater dischargers in the generation of existing credits
- “Bubble” loads from permitted sources other than wastewater on a watershed basis to facilitate trading and offsets among various permit holders.
- Design program (banking and aggregation) to mirror similar programs
- Include an evaluation of the “timing” of needs for credits – analyze drivers and when demand will appear.
- Need to quantify credits that may be available over time, currently there are surplus credits (point sources) but what will happen when those are used or needed by the generating facilities
- Allow “price discovery”
- “Term” vs. “perpetual” credits, standards for crediting and ability to use.
- Open and transparent process that will encourage the investment of private capital.
- Add “sediment” as a tradable commodity.

#### Discussion Questions:

What comments do you have on any of these elements?

Should all source sectors have access to all nature of credits (“term vs. “perpetual”) or should the current practice of restricting certain types of sources to certain credits continue?

What might be a logical grouping of permit holders to facilitate the bubbling of WLA in a particular watershed or geographic area?

What elements of existing environmental banking program should be reflected in an expanded nutrient credit exchange?

What elements of a program will promote “price discovery”

### **3. Scale:**

- Define the appropriate geographic scale in which trading should take place

#### Discussion question:

Should credits be exchanged between river basins beyond what is allowed today for point source exchanges between the Eastern Shore and the Potomac and Rappahannock?

### **4. Basis for Measuring Effectiveness”**

- Identify the basis for accounting for generated credits

#### Discussion Questions

How should practices, programs or landscape changes not included in the bay model be evaluated?

### **5. Drivers**

- Need to define the “key drivers” for new participants in the market
- Drivers for unregulated lands

#### Discussion Questions

How should nutrient loads from new septic/onsite/alternative systems be aggregated and offset at a geographic or jurisdictional scale?

What are the implications with changes coming to the construction general permit?

How will MS4 permits reflect TMDL requirements and offer opportunity for trading and offsets?

What methods can be used to facilitate reductions from unregulated lands?

### **6. Baseline**

- Define “beyond compliance” in an urban setting
- When is a credit available – what is the threshold for the credits a local government might generate
- Baseline for generating credits from agricultural land given the adoption of resource management plans

#### Discussion Questions

What changes to existing baseline requirements are necessary to update the Code of Virginia to reflect the establishment of the Chesapeake Bay TMDL?

Should urban credits be based on a practice by practice basis so long as proposed practices exceed the efficiencies presumed in the Chesapeake Bay model? Or should credits be generated from urban lands that go beyond the percentage reduction established in the TMDL for urban lands?

What should be the relationship between “resource management plans” as established in the Code and the baseline for credit generation from agricultural BMPs?

## **7. Reasonable Assurance**

- “Insurance” to protect credit buyers should credits fail to materialize or be maintained to reflect the long-term performance issues of some NPS credits.
- Need to establish “risk mitigation” for certain permit requirements
- Establish methods to address “liability” for the failure of credited practices.
- Maintain current NPS to PS trading ratio

### Discussion Questions

Should practices yield additional credits or be certified in some different fashion depending on their duration?

Should a certain percentage of credits be held in a central bank or depository that could be “retired” to maintain reductions in the event of widespread failure of credited practices?

## **8. Market Design and Participation**

- Open market to ensure that offsets are available to all sectors
- A clear process for private capital to be brought into the credit market
- A clear definition of participants in the market

### Discussion Question

How are these elements achieved?

## **9. Trusts, Banks and Brokers**

- Design in conformance with similar environmental banks including existing framework and oversight.

What entities should be eligible to bank credits and at what geographic scale?

What is the relationship between banks and state government?

What elements of existing environmental banking programs should be replicated?

### **Summary of Cross Cutting Issues and Research Needs:**

- Identify and clarify roles of levels of government and private sector
- How will land ownership patterns affect credit generation (significant number of farmers rent land and have less control)
- How will changes in the landscape affect baseline calculations, such as the “incentive” to remove dams because of more stringent regulations.
- Explore “future” offsets, such as shellfish aquaculture
- Determine the role of dams and their function with respect to nutrient control.
- Need to quantify reductions from environmental restoration and landscape protection activities